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(54) Title: OPTIMIZATION OF BINDING PROTEINS

(57) Abstract

    The invention relates to methods for manipulating nucleic acids so as to optimize the binding characteristics of an encoded binding protein by providing two or more nucleic acids encoding binding proteins having at least one set of splicing sites, the set of splicing sites flanking opposite ends of one or more encoded binding domains; mixing the nucleic acids to produce a parent population of mixed nucleic acids encoding binding proteins; and randomly incorporating the binding domains between the nucleic acids through the set of splicing sites to produce a different population of nucleic acids encoding binding proteins wherein at least one binding protein is characterized by substantially different binding characteristics than a member of the parent population.

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